

LOW VOC SOLVENT BASED DUCT SEALANT

A smooth, solvent based, premium quality, UL Classified, high pressure/high velocity duct sealant for commercial and industrial supply and return air duct use.

Recommended Uses:

DP 1090 is recommended for sealing joints, seams, and duct wall penetrations in commercial and industrial applications.

DP 1090 is recommended for sealing supply and return rectangular, round, oval and metal flexible ducts.

DP 1090 is recommended up to 15 inches water column pressure.

DP 1090 is recommended for projects requiring LEED certification.

Features and Benefits:

- LEED Qualified, Low VOC
- UL Classified
- California Compliant
- Excellent Workability
- Crack and Peel Resistant
- Mold and Mildew Resistant
- Excellent Adhesion
- Indoor and Outdoor Usage
- Minimal Shrinkage
- Sag Resistant
- Excellent Water and U.V. Resistance
- Adhesion to PVS/PVC Coated Steel
- Meets Requirements of NFPA 90A & 90B, ASTM E-84, and UL-723

Directions For Use:

Uses: DP 1090 may be used to seal joints on sheet metal and metal flexible supply and return air duct.

Surface Preparation: Surfaces should be clean, dry and free of dirt, oil and any foreign matter.

For sheet metal duct: DP 1090 should be applied to all connections according to SMACNA standards. Brush, caulk, pump or trowel DP 1090 on all duct seams. Apply to TDC/TDF and applied flange corners. Apply to all penetrations in the duct wall including sheet metal screw heads and tie rods. When caulking DP 1090, sealant should be brushed into seams.

For round and oval spiral duct: Apply DP 1090 to the male section of the fitting or to the inside slip duct coupling. Secure with sheet metal screws per manufacturers requirements. Apply a 2-inch band of DP 1090 around outside of joint, covering all screws.

For metal flexible duct: Install flexible duct per manufacturers instructions using drawbands or mechanical fastener. Apply DP 1090 between the end of the duct and the collar in a 2-inch band. Use DP 1090 to seal all connections of collar to metal duct.

Pressure Testing: Allow at least 24 hours before pressure testing. Since temperature and humidity conditions may vary, longer cure times may be required for specific installations.

Use only with proper ventilation and protection; consult MSDS. DP 1090 is flammable. Use with caution. For Professional Use Only.

Technical Data:

Color: Tan

Base: Solvent

Chemical Family: Synthetic Elastomeric

Solids Content: 68 ± 2%

Viscosity: Approx. 120,000 - 180,000 cps Application Temperature: 0°F to 110°F

Storage: Do not store where temperature exceeds 110°F or falls below 0°F. Optimum storage temperature at 60° F - 80° F **Freeze/Thaw Stability:** 5 cycles no deterioration (DPTM-20)

Service Temperature: -20°F to 190°F Flammability: Extremely flammable

Flash Point: Closed cup: -0.4°F (-18°C) Shelf Life: 9 Months (unopened containers)

Cure Time: 24-72 hours depending on temperature, humidity, and

application

Coverage: Dependent on application thickness, 80-100 sq. ft. at

approximately 20 wet mils

Clean Up: Mineral spirits or acetone

Packaging: 10 ounce tubes, 1 gallon pails

Pressure Classes: Meets all SMACNA pressure classes

Seal Classes: Meets all SMACNA seal classes

VOC: Less than 50 g/l

UNDERWRITERS LABORATORIES INC. CLASSIFIED ADHESIVES SURFACE BURNING CHARACTERISTICS

DP 1090 Duct Sealant Applied to Inorganic Reinforced Cement Board

Flame Spread: 0 0 Smoke Developed: 0 0

Test applied in one 2" (50.8 mm) wide strip - (A) 0.02 inch (0.508 mm) thick (B) 0.03 inch (0.7620 mm) thick. (Coverage: 11 percent of the exposed test area)

0.02 inch (0.508 mm) equals an applied rate of 80 sq. ft. per gallon and 0.03 inch (0.7620 mm) equals an applied rate of 53.3 sq. ft. per gallon



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PRODUCT NAME: SOLVENT BASED DUCT SEALER

PRODUCT CODE: DP 1090
PRODUCT TYPE: LIQUID

MANUFACTURERS' NAME: DESIGN POLYMERICS ADDRESS: 3301 W. Segerstrom Ave.

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TELEPHONE: 714-432-0600 BUSINESS HOURS: 7:30am – 4:30pm PT

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CHEMTREC INTERNATIONAL 703-527-3887

REFERENCE NUMBER: 3707
PRODUCT CODE: 510906
CHEMICAL FAMILY: ADHESIVE
REVISION DATE: 4/14/2015
REVISION #: 2.0

PREPARED BY: Technical Dept. Supersedes all previous

========== SECTION II - HAZARDOUS IDENTIFICATION ==================

OSHA/HCS status : This material is considered hazardous by the OSHA Hazard Communication Standard

(29 CFR 1910.1200).

Classification of the substance or mixture

: FLAMMABLE LIQUIDS - Category 2

SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2A

CARCINOGENICITY (inhalation) - Category 2

SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract

irritation and Narcotic effects) - Category 3



Signal word : Danger

Hazard statements : Highly flammable liquid and vapor.

Causes serious eye irritation.

Suspected of causing cancer if inhaled. May cause respiratory irritation. May cause drowsiness and dizziness

Precautionary statements

General : Read label before use. Keep out of reach of children. If medical advice is needed,

have product container or label at hand.

Prevention: Obtain special instructions before use. Do not handle until all safety precautions have

been read and understood. Use personal protective equipment as required. Wear protective gloves. Wear eye or face protection. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use explosion-proof electrical, ventilating, lighting and all material-handling equipment. Use only nonsparking

tools. Take precautionary measures against static discharge. Keep container tightly closed. Use only outdoors or in a well-ventilated area. Avoid breathing vapor.

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Wash hands thoroughly after handling.

Response : IF exposed or concerned: Get medical attention. IF INHALED: Remove victim to fresh

air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or

physician if you feel unwell. IF ON SKIN (or hair): Take off immediately all

contaminated clothing. Rinse skin with water or shower. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.

Continue rinsing. If eye irritation persists: Get medical attention.

Storage : Store locked up. Store in a well-ventilated place. Keep cool.

Disposal : Dispose of contents and container in accordance with all local, regional, national and

international regulations.

Supplemental label

Elements : Avoid contact with skin and clothing. Wash thoroughly after handling.

Hazards not otherwise

classified : Prolonged or repeated contact may dry skin and cause irritation.

========= SECTION III - COMPOSITION/INFORMATION ON INGREDIENTS ==================

Hazardous ingredients

United States

NAME	CAS NUMBER	%
methyl acetate	79-20-9	25 - 50
n-hexane	10-54-3	1 - 5
Methanol	67-56-1	0.1-0.5
Vinyl acetate	108-05-4	0.1-0.5
6,6'-di-tert-butyl-2,2'-methylenedi-p-cresol	119-47-1	0.1-0.5

Canada

 		
NAME	CAS NUMBER	%
Methyl acetate	79-20-9	25-50
n-hexane	110-54-3	1-5
methanol	67-56-1	0.1-0.5
Vinyl acetate	108-05-4	0.1-0.5

Mexico

					С	LASSI	FICATION	ON
NAME	CAS NUMBER	UN NUMBER	%	IDLH	Н	F	R	SPECIAL
Methyl acetate	79-20-9	UN1993	25 - 50	3100 ppm	2	3	0	-
n-hexane	110-54-3	UN1993	1 - 5	1100 ppm	1	3	1	-

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

SECTION IV - FIRST AID MEASURES	

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Description of necessary first aid measures

Eye contact :Immediately flush eyes with plenty of water, occasionally lifting the upper and lower

eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10

minutes. Get medical attention.

Inhalation :Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it

is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention. If necessary, call a poison center or physician. If unconscious, place in recovery position and get medical attention immediately. Maintain an open

airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Skin contact: Wash skin thoroughly with soap and water or use recognized skin cleanser. Remove

contaminated clothing and shoes. Continue to rinse for at least 10 minutes. Get medical attention. Wash clothing before reuse. Clean shoes thoroughly before reuse.

Ingestion: Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and

keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention. If necessary, call a poison center or physician. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention

immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt

or waistband.

Most important symptoms/effects, acute and delayed

Potential acute health effects

Eye contact : Causes serious eye irritation.

Inhalation : Can cause central nervous system (CNS) depression. May cause drowsiness and

dizziness. May cause respiratory irritation.

Skin contact: Defatting to the skin. May cause skin dryness and irritation.

Ingestion : Can cause central nervous system (CNS) depression. Irritating to mouth, throat and

stomach.

Over-exposure signs/symptoms

Eye contact : Adverse symptoms may include the following:

pain or irritation watering redness

Inhalation :Adverse symptoms may include the following:

respiratory tract irritation

coughing

nausea or vomiting

headache

drowsiness/fatigue dizziness/vertigo unconsciousness

Skin contact: Adverse symptoms may include the following:

irritation

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dryness cracking

Ingestion: No specific data.

Indication of immediate medical attention and special treatment needed, if necessary

Notes to physician : Treat symptomatically. Contact poison treatment specialist immediately if large

quantities have been ingested or inhaled.

Specific treatments: No specific treatment.

Protection of first-aiders: No action shall be taken involving any personal risk or without suitable training. If it is

suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to

give mouth-to-mouth resuscitation.

See toxicological information (Section 11)

Extinguishing media

Suitable extinguishing

: Use dry chemical, CO₂, water spray (fog) or foam.

Media

Unsuitable extinguishing

media

: Do not use water jet.

Specific hazards arising from the chemical

: Highly flammable liquid and vapor. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. Runoff to sewer may create fire or explosion hazard.

Hazardous thermal

: Decomposition products may include the following materials:

decomposition products

carbon dioxide carbon monoxide

Special protective actions for fire-fighters

: Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water

spray to keep fire-exposed containers cool.

Special protective

equipment for fire-fighters

: Fire-fighters should wear appropriate protective equipment and self-contained breathing

apparatus (SCBA) with a full face-piece operated in positive pressure mode.

For non-emergency

Personnel

: No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

For emergency responders

: If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For nonemergency personnel".

Environmental precautions

: Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Methods and materials for containment and cleaning up

Small spill

: Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Dilute with water and mop up if water-soluble. Alternatively,

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Large spill

or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

: Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

Precautions for safe handling

Protective measures

: Put on appropriate personal protective equipment (see Section 8). Avoid exposure - obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not ingest. Avoid breathing vapor or mist. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Take precautionary measures against electrostatic discharges. Empty containers retain product residue and can be hazardous. Do not reuse container.

Advice on general occupational hygiene

: Store between the following temperatures: -17 to 40°C (1.4 to 104°F). Store in handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

Conditions for safe storage, including any incompatibilities

: Store between the following temperatures: -17 to 40°C (1.4 to 104°F). Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Eliminate all ignition sources. Separate from oxidizing materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

Control parameters
<u>United States</u>
Occupational exposure limits

Ingredient Name	Exposure Limits
ingreatent name	Exposure Emilio

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	ACOULTI V (United Order Algorith
methyl acetate	ACGIH TLV (United States, 4/2014).
	TWA: 200 ppm 8 hours.
	TWA: 606 mg/m³ 8 hours.
	STEL: 250 ppm 15 minutes.
	STEL: 757 mg/m³ 15 minutes.
	OSHA PEL 1989 (United States, 3/1989).
	TWA: 200 ppm 8 hours.
	TWA: 610 mg/m³ 8 hours.
	STEL: 250 ppm 15 minutes.
	STEL: 760 mg/m³ 15 minutes.
	NIOSH REL (United States, 10/2013).
	TWA: 200 ppm 10 hours. TWA: 610 mg/m³ 10 hours.
	STEL: 250 ppm 15 minutes.
	STEL: 760 mg/m³ 15 minutes.
	OSHA PEL (United States, 2/2013).
	TWA: 200 ppm 8 hours.
	TWA: 200 ppm o nodis. TWA: 610 mg/m ³ 8 hours.
	TWA. 010 Highlif o flouis.
n-hexane	OSHA PEL 1989 (United States, 3/1989).
	TWA: 50 ppm 8 hours.
	TWA: 30 ppm 6 hours. TWA: 180 mg/m³ 8 hours.
	NIOSH REL (United States, 10/2013).
	TWA: 50 ppm 10 hours.
	TWA: 50 ppm 10 hours.
	ACGIH TLV (United States, 4/2014). Absorbed through skin.
	TWA: 50 ppm 8 hours.
	OSHA PEL (United States, 2/2013).
	TWA: 500 ppm 8 hours.
	TWA: 300 ppm 8 hours.
	TWA. 1000 Highlie o flouis.
Methanol	ACGIH TLV (United States, 4/2014). Absorbed through skin.
	TWA: 200 ppm 8 hours.
	TWA: 260 ppm o nodis. TWA: 262 mg/m ³ 8 hours.
	STEL: 250 ppm 15 minutes.
	STEL: 328 mg/m³ 15 minutes.
	OSHA PEL 1989 (United States, 3/1989). Absorbed through skin.
	TWA: 200 ppm 8 hours.
	TWA: 260 mg/m³ 8 hours.
	STEL: 250 ppm 15 minutes.
	STEL: 325 mg/m³ 15 minutes.
	NIOSH REL (United States, 10/2013). Absorbed through skin.
	TWA: 200 ppm 10 hours.
	TWA: 260 ppm 10 hours.
	STEL: 250 ppm 15 minutes.
	STEL: 325 mg/m³ 15 minutes.
	OSHA PEL (United States, 2/2013).
	TWA: 200 ppm 8 hours.
	TWA: 260 ppm o nodis. TWA: 260 mg/m³ 8 hours.
vinyl acetate	ACGIH TLV (United States, 4/2014).
vinyl acetate	ACGIH TLV (United States, 4/2014). TWA: 10 ppm 8 hours.
vinyl acetate	TWA: 10 ppm 8 hours.
vinyl acetate	TWA: 10 ppm 8 hours. TWA: 35 mg/m³ 8 hours.
vinyl acetate	TWA: 10 ppm 8 hours. TWA: 35 mg/m³ 8 hours. STEL: 15 ppm 15 minutes.
vinyl acetate	TWA: 10 ppm 8 hours. TWA: 35 mg/m³ 8 hours. STEL: 15 ppm 15 minutes. STEL: 53 mg/m³ 15 minutes.
vinyl acetate	TWA: 10 ppm 8 hours. TWA: 35 mg/m³ 8 hours. STEL: 15 ppm 15 minutes. STEL: 53 mg/m³ 15 minutes. OSHA PEL 1989 (United States, 3/1989).
vinyl acetate	TWA: 10 ppm 8 hours. TWA: 35 mg/m³ 8 hours. STEL: 15 ppm 15 minutes. STEL: 53 mg/m³ 15 minutes.

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STEL: 20 ppm 15 minutes. STEL: 60 mg/m³ 15 minutes. NIOSH REL (United States, 10/2013). CEIL: 4 ppm 15 minutes. CEIL: 15 mg/m³ 15 minutes.

Canada

Occupational e	xposure limits	TWA ((8 hours	s)	STEL (15 mins	s)	Ceilin	g		
Ingredient	List name	ppm	mg/ m³	Other	ppm	mg/ m³	Other	ppm	mg / m³	Othe r	Notations
Methyl acetate	US ACGIH 4/2014	200	606	_	250	757	_	l _	-	_	
monty acctato	AB 4/2009	200	606	_	250	757	_	_	_	_	
	BC 4/2014	200	-	_	250	_	_	_	_	_	
	ON 1/2013	200	606	-	250	757	_	_	-	_	
	QC 1/2014	200	606	-	250	757	-	-	-	-	
n-hexane	US ACGIH 4/2014	50	-	-	-	-	-	-	-	-	[1]
	AB 4/2009	50	176	_	-	-	-	-	-	-	[1]
	BC 4/2014	20	-	-	-	-	-	-	-	-	[1]
	ON 1/2013	50	-	-	-	-	-	-	-	-	[1]
	QC 1/2014	50	176	-	-	-	-	-	-	-	[1]
methanol	US ACGIH 4/2014	200	262	-	250	328	-	-	-	-	[1]
	AB 4/2009	200	262	-	250	328	-	-	-	-	[1]
	BC 4/2014	200	-	-	250	-	-	-	-	-	[1]
	ON 1/2013	200	262	-	250	328	-	-	-	-	[1]
	QC 1/2014	200	262	-	250	328	-	-	-	-	[1]
vinyl acetate	US ACGIH 4/2014	10	35	-	15	53	-	-	-	-	
	AB 4/2009	10	35	-	15	53	-	-	-	-	
	BC 4/2014	10	-	-	15	-	-	-	-	-	
	ON 1/2013	10	35	-	15	53	-	-	-	-	
	QC 1/2014	10	35	-	15	53	-	-	-	-	

^[1]Absorbed through skin.

<u>Mexico</u>

Occupational exposure limits

Ingredient	Exposure limits
methyl acetate	NOM-010-STPS (Mexico, 9/2000).
	LMPE-PPT: 200 ppm 8 hours.
	LMPE-PPT: 610 mg/m ³ 8 hours.
	LMPE-CT: 760 mg/m ³ 15 minutes.
	LMPE-CT: 250 ppm 15 minutes.
n-hexane	NOM-010-STPS (Mexico, 9/2000).
	LMPE-PPT: 50 ppm 8 hours.

SOLVENT BASED DUCT SEALER **DP 1090** Page: 8 LMPE-PPT: 176 mg/m³ 8 hours. Consult local authorities for acceptable exposure limits. Appropriate engineering : Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or **Controls** other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment. **Environmental exposure** : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some **Controls** cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels. Individual protection measures Hygiene measures : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location. Eye/face protection :Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles. Skin protection Hand protection : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated. : Personal protective equipment for the body should be selected based on the task being **Body protection** performed and the risks involved and should be approved by a specialist before handling this product. When there is a risk of ignition from static electricity, wear antistatic protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves. Other skin protection : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

working limits of the selected respirator.

: Use a properly fitted, air-purifying or air-fed respirator complying with an approved

standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe

Appearance

Respiratory protection

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SOLVENT BASED DUCT SEALER **DP 1090**

Physical state : Liquid [paste] Color : Brown [Light] Odor Solvent(s) **Odor Threshold** : Not Available. рΗ : Not applicable. **Melting Point** : Not Available. **Boiling point** : 54.44 °C (130°F)

Flash point : Closed cup: -18°C (-0.4°F) **Evaporation Rate** : >1 (butyl acetate = 1)

44 g/l

Flammability (solid,gas): Flammable in the presence of the following materials or conditions: open flames, spars and

static discharge and heat.

VOC (less water, less

exempt solvents)

: 1.2469 Reletive density

Solubility : very slightly soluble in the following materials: cold water and hot water.

Auto-ignition temperature : 252°C (485.6°F)

SECTION X – STABILITY AND REACTIVITY DATA

Reactivity : No specific test data related to reactivity available for this product or its ingredients.

Chemical stability : The product is stable.

Possibility of hazardous: Under normal conditions of storage and use, hazardous reactions will not occur.

reactions.

Conditions to avoid : Avoid all possible sources of ignition (spark or flame). Do not pressurize, cut, weld,

braze, solder, drill, grind or expose containers to heat or sources of ignition.

: Reactive or incompatible with the following materials: Incompatible materials

oxidizing materials

Products

Hazardous decomposition: Under normal conditions of storage and use, hazardous decomposition products should

not be produced.

SECTION XI – TOXICOLOGICAL INFORMATION

Information on toxicological effects

Acute toxicity

Product/Ingredient name	Result	Species	Dose	Exposure
Methyl acetate	LD50 Dermal	Rabbit	>5 g/kg	-
-	LD50 Oral	Rat	>5 g/kg	-
n-hexane	LC50 Inhalation Gas	Rat	48000 ppm	4 hours
	LD50 Dermal	Rabbit	>3295 mg/kg	-
	LD50 Oral	Rat	15840 mg/kg	-
methanol	LC50 Inhalation Gas	Rat	145000 ppm	1 hour
	LC50 Inhalation Gas	Rat	64000 ppm	4 hours
	LD50 Dermal	Rabbit	158000 mg/kg	-
	LD50 Oral	Rat	5600 mg/kg	-
vinyl acetate	LC50 Inhalation Vapor	Rat	11400 mg/m3	4 hours
	LD50 Dermal	Rabbit	2335 mg/kg	-
	LD50 Oral	Rat	2900 mg/kg	-
6,6'-di-tert-butyl-2,2'-	LD50 Oral	Rat	4880 mg/kg	-
methylenedi-p-cresol			1000 mg/kg	

Conclusion/Summary :Not available

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Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
methyl acetate	Eyes - Moderate irritant	Rabbit	-	24 hours 100	-
				Milligrams	
Skin – Mild irritant	Skin – Mild irritant	Rabbit	-	24 hours 500	-
				milligrams	
Skin – Moderate irritant	Skin – Moderate irritant	Rabbit	-	24 hours 20	-
				milligrams	
n-hexane	Eyes – Mild irritant	Rabbit	-	10 milligrams	-
methanol	Eyes – Moderate irritant	Rabbit	-	24 hours 100	-
				milligrams	
Eyes – Mild irritant	Eyes – Mild irritant	Rabbit	-	40 milligrams	
Eyes – Moderate irritant	Eyes – Moderate irritant	Rabbit	-	24 hours 20	
				Milligrams	
6,6'-di-tert-butyl-2,2'-	Eyes – Moderate irritant	Rabbit	-	24 hours 100	
Methylenedi-p-cresol				milligrams	

Conclusion/Summary

Skin: Prolonged or repeated contact can defat the skin and lead to irritation, cracking and/or dermatitis

Eyes: This product may irritate eyes upon contact.

Respiratory : High vapor concentrations can cause headaches, dizziness, drowsiness and nausea and may lead to

unconsciousness.

Specific target organ toxicity (single exposure)

Name	Category	Route of exposure	Target organs
Methyl acetate	Category 3	Not applicable	Respiratory tract irritation and Narcotic effects
n-hexane	Category 3	Not applicable	Respiratory tract irritation and Narcotic effects
methanol	Category 1	Not determined	Narcotic effects Not determined

Specific target organ toxicity (repeated exposure)

Name	Category	Route of exposure	Target organs
n-hexane	Category 1	Inhalation	Peripheral nervous system

Aspiration hazard

Name	Result
n-hexane	ASPIRATION HAZARD – Category 1

Information on the likely

: Not available.

routes of exposure

Potential acute health effects

Eye Contact : Causes serious eye irritation.

Inhalation: Can cause central nervous system (CNS) depression. May cause drowsiness and dizziness.

May cause respiratory irritation.

Skin contact: Defatting to the skin. May cause skin dryness and irritation.

Ingestion: Can cause central nervous system (CNS) depression. Irritating to mouth, throat and stomach.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact: Adverse symptoms may include the following:

pain or irritation

watering redness

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Inhalation : Adverse symptoms may include the following:

Respiratory tract irritation

Coughing

Nausea or vomiting

Headache

Drowsiness/fatigue Dizziness/vertigo Unconsciousness

Skin contact: Adverse symptoms may include the following:

Irritation Dryness Cracking

Ingestion: No specific data

Delayed and immediate effects and also chronic effects from short and long term exposure

Short term exposure

Potential immediate effects : Not available.
Potential delayed effects : Not available

Long term exposure

Potential immediate effects : Not available
Potential delayed effects : Not available

Toxicity

Product/ingredient name	Result	Species	Exposure
Methyl acetate	Acute LC50 408000 μg/l Fresh water	Fish - Pimephales promelas - Juvenile (Fledgling, Hatchling, Weanling)	96 hours
n-hexane	Acute EC50 0.89 mg/l Acute EC50 3.9 mg/l Acute LC50 2.5 mg/l Chronic NOEC 4.9 mg/l Chronic NOEC 2.8 mg/l	Algae Crustaceans Fish - fathead minnow Crustaceans Fish - rainbow trout	96 hours 48 hours 96 hours 21 days 28 days
methanol	Acute EC50 16.912 mg/l Marine water Acute LC50 2500000 µg/l Marine water Acute LC50 3289 to 4395 mg/l Fresh water Acute LC50 290 mg/l Fresh water Chronic NOEC 9.96 mg/l Marine water	Algae - Ulva pertusa Crustaceans - Crangon crangon - Adult Daphnia - Daphnia magna - Neonate Fish - Danio rerio – Egg Algae - Ulva pertusa	96 hours 48 hours 48 hours 96 hours
vinyl acetate	Acute EC50 8.81 mg/l Acute EC50 12.6 mg/l Acute LC50 10000 to 100000 μg/l Marine water Acute LC50 14000 μg/l Fresh water Chronic NOEC 1.58 mg/l	Algae – Pseudokirchnerella subcapitata Daphnia Crustaceans - Crangon crangon - Larvae Fish - Pimephales promelas Algae – Pseudokirchnerella subcapitata	96 hours 48 hours 48 hours 96 hours 96 hours

Conclusion/Summary: Not available.

Persistence and degradability

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability				
n-hexane	-	-	Readily				
methanol	-	-	Readily				
vinyl acetate	-	-	Readily				
			-				

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Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential
Methyl acetate	0.18	-	Low
n-hexane	4	501-187	high
methanol	-0.77	<10	Low
vinyl acetate	0.73	3.16	Low
6,6'-tert-butyl-2,2'-methylenedi-p-	6.25	549.54	high
cresol			

Other adverse effects: No known significant effects or critical hazards.

	SECTION XIII -	 DISPOSAL CON 	NSIDERATIONS	
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Disposal methods

: The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Vapor from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

	DOT Classification	TDG Classification	Mexico Classification	ADR/RID	IMDG	IATA
UN number	1133	1133	1133	1133	1133	1133
UN proper Shipping name	ADHESIVES	ADHESIVES	ADHESIVES	ADHESIVES, Containing Flammable liquid	ADHESIVES	ADHESIVES, Containing Flammable liquid
Transport Hazard class(es)	3	3	3	3	3	3
Packing Group	III	III	III	III	III	III

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Environmental Hazards	No	No	No	No	No	No
Additional information	Remarks Limited quantity	Remarks Limited Quantity	Remarks Limited Quantity	Special Provisions 640 (E) Tunnel code (D/E) Remarks Limited Quantity	<u>Remarks</u>	

Special precautions for user

: Transport within user's premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

: Not available.

U.S. Federal regulations :TSCA 8(a) PAIR: methyl acetate; tert-butyl acetate

TSCA 8(a) CDR Exempt/Partial exemption: Not determined

United States inventory (TSCA All components are listed or exempted. 8b):

Clean Air Act Section 112

(b) Hazardous Air Pollutants (HAPs)

: Listed

Clean Air Act Section 602

: Not listed

Class I Substances

Clean Air Act Section 602

: Not listed

Class II Substances

SARA 302/304

Composition/information on ingredients

Composition/information on ingredients								
Name	%	EHS	SARA 302 T	SARA 302 TPQ		2 TPQ SARA 304 RQ		RQ
			(lbs)	(gallons)	(lbs)	(gallons)		
Vinyl acetate	0.1-0.5	Yes	1000	129	5000	644.8		

SARA 304 RQ

: 2412459.1 lbs / 1095256.4 kg [232044.4 gal / 878383.5 L]

SARA 311/312

Classification

: Fire hazard

Immediate (acute) health hazard Delayed (chronic) health hazard

Composition/information on ingredients

Name	%	Fire Hazard	Sudden Release of Pressure	Reactive	Immediate (acute) Health Hazard	Delayed (chronic) Health hazard
Methyl acetate	25-50	Yes	No	No	Yes	No
n-hexane	1-5	Yes	No	No	Yes	Yes
methanol	0.1-0.5	Yes	No	No	Yes	Yes
vinyl acetate	0.1-0.5	Yes	No	No	No	Yes
6,6'-di-tert-butyl-2,2'-methylenedi-p-cresol	0.1-0.5	Yes	No	No	No	Yes

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SARA 313

	Product name	CAS number	%
Form R-Reporting	n-hexane	110-54-3	1-5
requirements	vinyl acetate	108-05-4	0.1-0.5
Supplier notification	n-hexane	110-54-3	1-5
	vinyl acetate	108-05-4	0.1-0.5

SARA 313 notifications must not be detached from the SDS and any copying and redistribution of the SDS shall include copying and redistribution of the notice attached to copies of the SDS subsequently redistributed.

State regulations

Massachusetts : The following components are listed: METHYL ACETATE; HEXANE

New York : The following components are listed: Vinyl acetate; Hexane

New Jersey : The following components are listed: METHYL ACETATE; ACETIC ACID, METHYL ESTER; VINYL ACETATE; ACETIC ACID ETHENYL ESTER; n-HEXANE; HEXANE

Pennsylvania : The following components are listed: ACETIC ACID, METHYL ESTER; ACETIC ACID

ETHENYL ESTER; HEXANE

California Prop. 65

WARNING: This product contains a chemical known to the State of California to cause birth defects or other reproductive harm.

Reproductive No significant risk Ingredient name Cancer Maximum Level Acceptable dosage level Methanol No 45000 µg/day 23000 µg/day ves (ingestion) (ingestion) 47000 μg/day 47000 μg/day (inhalation) (inhalation)

Canada

Canadian lists

Canadian NPRI : The following components are listed: n-Hexane

CEPA Toxic substances: None of the components are listed.

Canada inventory : Not determined.

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations.

Mexico

Classification :



International regulations

International lists : Australia inventory (AICS): Not determined.

China inventory (IECSC): Not determined.

Japan inventory: Not determined. **Korea inventory**: Not determined.

Malaysia Inventory (EHS Register): Not determined.

New Zealand Inventory of Chemicals (NZIoC): Not determined.

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Philippines inventory (PICCS): Not determined. Taiwan inventory (CSNN): Not determined.

Europe : Not determined.
Chemical Weapons : Not listed

Chemical Weapons

Convention List Schedule

I Chemicals

Chemical Weapons

Convention List Schedule

II Chemicals

Chemical Weapons

Convention List Schedule

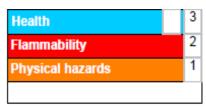
III Chemicals

: Not listed

: Not listed

======= SECTION XVI -OTHER INFORMATION ======================

Hazardous Material Information System (U.S.A.)



Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks Although HMIS® ratings are not required on SDSs under 29 CFR 1910. 1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered mark of the National Paint & Coatings Association (NPCA). HMIS® materials may be purchased exclusively from J. J. Keller (800) 327-6868.

The customer is responsible for determining the PPE code for this material.

National Fire Protection Association (U.S.A.)



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History

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Date of issue/Date of

Revision

: 5/22/2015.

Date of previous issue

: No previous validation.

Version

Key to abbreviations

: ATE = Acute Toxicity Estimate BCF = Bioconcentration Factor

GHS = Globally Harmonized System of Classification and Labelling of Chemicals

IATA = International Air Transport Association

IBC = Intermediate Bulk Container

IMDG = International Maritime Dangerous Goods

LogPow = logarithm of the octanol/water partition coefficient

MARPOL 73/78 = International Convention for the Prevention of Pollution From Ships,

1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)

UN = United Nations

References

: Not available.

Indicates information that has changed from previously issued version.

Notice to reader

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